

IN THE CLAIMS:

Claim1 (currently amended) A process for the preparation of a polypropylene polymer composition with bimodal rubber, said process comprising the steps of:

- i) feeding propylene to a at least one slurry reactor and producing a polypropylene polymer matrix in the presence of a polymerisation polymerization catalyst in said at least one slurry reactor,
- ii) transferring the slurry reactor product into a gas phase reactor (GPR),
- iii) feeding a first mixture of ethylene and propylene to said first gas phase reactor and producing a first ethylene/propylene-copolymer in the polymer matrix in the presence of a polymerisation polymerization catalyst in said first gas phase reactor,
- iv) transferring the first gas phase reactor product into a second gas phase reactor, and
- v) feeding a second mixture of ethylene and propylene to said second gas phase reactor and producing a second ethylene/propylene-copolymer in the polymer matrix in the presence of a polymerisation polymerization catalyst in said second gas phase reactor, and

vi) recovering the polymer product produced in step v)
for further processing,

wherein said first and second ethylene/propylene mixtures having different composition ratios and wherein said first ethylene/propylene-copolymer has a higher molecular weight than said second ethylene/propylene-copolymer.

Claim 2 (currently amended) ~~Process according to The process of claim 1, wherein the composition ratios of said first and second ethylene/propylene mixtures are adjusted so that in the first gas phase reactor, a propylene rich ethylene propylene rubber (EPR) rubber is produced in the propylene polymer matrix, and in the second gas phase reactor, a an ethylene rich EPR rubber is produced in the propylene polymer matrix.~~

Claim 3 (currently amended) ~~Process according to any of claims 1 or 2~~ The process of claim 1, whereby the polymerisation polymerization conditions in the gas phase reactors are such that in one GPR reactor A, the gas phase polymerisation polymerization step is carried out by adding propylene and ethylene monomers where the resulting amount of C₂ in the EPR formed in gas phase reactor A is in the

range from 39 – 74 mol%, preferably 53 – 65 mol% and that in the other GPR reactor B, the gas phase polymerisation polymerization step is carried out by adding propylene and ethylene monomers where the resulting amount of C₂ in the EPR formed in gas phase reactor B is in the range from 77 – 99,9 mol%, preferably 84 – 96 mol% 77 – 99.9mol%.

Claim 4 (currently amended) Process according to The process of claim 3, whereby in GPR reactor A, the molar H₂/C₂ ratio is in the range between 0,01 to 0,1 0.01 to 0.1, preferably 0,03 to 0,06 and most preferably 0,05 and in GPR reactor B, the molar H₂/C₂ ratio is in the range between 0,3 to 0,7, 0.3 to 0.7 preferably 0,4 to 0,6 and most preferably 0,5.

Claim 5 (currently amended) Process according to any of the preceding claims The process of claim 1, whereby the polymer products are flashed before transferring them to the next polymerisation polymerization step.

Claim 6 (currently amended) Process any of the preceding claims The process of claim 1, whereby the first and second GPR polymerisation polymerization steps are carried out in the same gas phase reactor.

Claim 7 (currently amended) ~~Process according to any of the preceding claims~~ The process of claim 1, whereby the polymer product obtained in step vi is further treated for compounding with additives and/or fillers.

Claim 8 (currently amended) ~~Polymer~~ The polymer product obtainable obtained according to the process of ~~any of the preceding claims~~ claim 1.

Claim 9 (currently amended) ~~Polymer~~ The polymer product ~~according to of~~ claim 8, further comprising at least one additive or filler selected from minerals, slip agent and processing agents.

Claim 10 (currently amended) ~~Polymer~~ The polymer product obtainable obtained according to the process of ~~any of the preceding claims~~ claim 1 and having a dL value of less than 4, preferably ~~less than 2~~.

Claim 11 (currently amended) Use of the polymer of ~~claims 8 to 10~~ claim 8 for manufacturing ~~moulded~~ molded articles.

Claim 12 (currently amended) ~~Moulded~~ A molded article[,] comprising the polymer of ~~any of claims 8 to 10~~ claim 8.

- Claim 13 (new) The process of claim 3, wherein the resulting amount of C₂ in the EPR formed in gas phase reactor A is in the range from 53 – 65 mol%.
- Claim 14 (new) The process of claim 3, wherein the resulting amount of C₂ in the EPR formed in gas phase reactor B is in the range from 84 – 96 mol%.
- Claim 15 (new) The process of claim 3, whereby in GPR reactor A, the molar H₂/C₂ ratio is in the range between 0.03 to 0.06.
- Claim 16 (new) The process of claim 3, whereby in GPR reactor A, the molar H₂/C₂ ratio is 0.05.
- Claim 17 (new) The process of claim 3, whereby in GPR reactor B, the molar H₂/C₂ ratio is in the range between 0.4 to 0.6.
- Claim 18 (new) The process of claim 3, whereby in GPR reactor B, the molar H₂/C₂ ratio is 0.5.
- Claim 19 (new) The polymer product of claim 10 having a dL value of less than 2.

- Claim 20 (new) Use of the polymer of claim 9 for manufacturing molded articles.
- Claim 21 (new) Use of the polymer of claim 10 for manufacturing molded articles.
- Claim 22 (new) Use of the polymer of claim 19 for manufacturing molded articles.
- Claim 23 (new) A molded article comprising the polymer of claim 9.
- Claim 24 (new) A molded article comprising the polymer of claim 10.
- Claim 25 (new) A molded article comprising the polymer of claim 19.